

WHAT IS CLAIMED IS:

1. A method of generating a semantic representation of a string of words from a language, the method comprising:

identifying at least one semantic token activated by a word;

placing the identified semantic token in a list of potential semantic tokens for the semantic representation of the string of words;

placing a wildcard semantic token in the list of potential semantic tokens for the word, the wildcard semantic token being capable of being activated by every word in the language; and

building the semantic representation in part by utilizing one of the semantic tokens in the list of potential semantic tokens.

2. The method of claim 1 wherein placing semantic tokens in the list comprises placing partial parses of semantic tokens in a chart and full parses of semantic tokens in a candidate list.

3. The method of claim 2 wherein placing partial parses of semantic tokens in the chart comprises providing an indication of the identity of an item needed to extend the partial parse.

4. The method of claim 3 wherein the item needed to extend a partial parse comprises a semantic token.

5. The method of claim 4 wherein the item needed to extend a partial parse comprises a wildcard semantic token.

6. The method of claim 3 wherein placing the wildcard semantic token in the list of potential semantic tokens comprises only placing the wildcard semantic token in the list under two alternative conditions.

7. The method of claim 6 wherein the two alternative conditions comprise A) if the word is the first word in the string of words and the entire sentence can begin with a wildcard according to the grammar; and B) if a partial parse in the chart needs a semantic token that can begin with a wildcard semantic token.

8. The method of claim 1 wherein building the semantic representation comprises:

generating a semantic representation that  
spans the entire string of words;

identifying a skipped word in the string of  
words that is not associated with a

semantic token in the semantic representation;  
determining that a word to the left of the skipped word is associated with a wildcard semantic token; and  
associating the skipped word with the wildcard semantic token.

9. A method of parsing text to form a semantic structure, the semantic structure formed of terminal nodes and non-terminal nodes, each non-terminal node being represented by a semantic token that is defined by child nodes beneath the semantic token, the method comprising:

generating a semantic token that has a word in the text as a child node;  
generating a wildcard semantic token for a word in the text, the wildcard semantic token being capable of having any word as a child node;  
generating a semantic token that has a wildcard semantic token as a child node; and  
utilizing at least one of the generated semantic tokens in the semantic structure.

10. The method of claim 9 wherein generating a semantic token that has a wildcard semantic token as a child node comprises generating a semantic token that

has a wildcard semantic token as a left-most child node.

11. The method of claim 10 wherein generating a wildcard semantic token for a word comprises:

determining if any generated semantic tokens have an unfilled child node that is defined in part by a left-most child node that is expecting a wildcard semantic token; and

generating the wildcard semantic token based on the fact that an unfilled child node has a left-most child node that is expecting a wildcard semantic token.

12. The method of claim 9 further comprising:  
identifying a skipped word in the text that has not been associated with a semantic token in the semantic structure;  
determining that a word to the left of the skipped word is associated with a wildcard semantic token; and  
adding the skipped word as a child node of the wildcard semantic token.

13. The method of claim 9 further comprising associating a wildcard semantic token with a previously generated semantic token that is expecting a wildcard semantic token.

14. A computer-readable medium having computer-executable instructions for generating a semantic representation of an input text string by performing steps comprising:

constructing potential portions of the semantic representation based on the input text string;

determining that one of the potential portions of the semantic representation can be extended by a wildcard; and

designating a word in the text string as a wildcard to extend the potential portion of the semantic representation.

15. The computer-readable medium of claim 14 having computer-executable instructions for performing further steps of:

identifying a skipped word in the input text string that is not directly linked to the semantic representation;

determining that a word adjacent to the skipped word was designated as a wildcard; and

designating the skipped word as part of the wildcard.